

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application.

Claims 1-16, 19 and 20 are pending the application. Claims 1-5, 7, 10, 16 and 19 are amended. Claims 1, 5, 16 and 19 are independent. Claims 17 and 18 are canceled without prejudice to or disclaimer of the subject matter contained therein. Reconsideration of this application, as amended, is respectfully requested.

Rejection under 35 U.S.C. § 103(a)/Allowable Subject Matter

Claims 1-4, 12, 13, 17 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' admitted Prior Art in view of U.S. Patent No. 2,886,149 to Baermann, U.S. Patent No. 3,893,191 to Gold et al., or U.S. Patent No. 5,421,055 to Harmon et al.

Claims 14 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' admitted Prior Art in view of Baermann, Gold et al. or Harmon et al., and further in view of JP 10-311265 or U.S. Patent No. 4,589,534 to Apetrei. These rejections are respectfully traversed.

Claims 5-10, 16, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants thank the Examiner for the early indication of allowable subject matter. Claims 5, 16 and 19 are rewritten in independent form including all the limitations of the base and any intervening claims, and are therefore allowable over the applied prior art of record.

While not conceding the appropriateness of any of the rejections, but merely to expedite the prosecution of the instant application, independent claim 1 is amended to recite a combination of elements in an washing machine, including “a transformation operating means for applying voltages of different levels to the solenoid coil according to the position of the coupling member, wherein the transformation operating means supplies a voltage of a higher level to the solenoid coil during an initial operation for generating electromagnetic force so as to move the coupling member upward, and supplies a voltage of a lower level during a maintaining operation for maintaining a state where the coupling member is completely moved upward.”

It is respectfully submitted that the combination of elements recited in independent claim 1 is not disclosed or made obvious over the applied prior art of record, including the Applicants' admitted Prior art, Baermann, Gold et al., Harmon et al., JP 10-311265 or Apetrei et al.

Applicants' admitted Prior Art discloses the combination of elements in a washing machine, including a clutch device 131 which includes a coupling member

133 and a solenoid actuator, as shown in Fig. 1. The Office Action relies on each of Baermann, Gold et al., and Harmon et al. for teaching clutching equipment in which a solenoid provides an electromagnetic repulsive force. On page 3 of the Office Action, Harmon et al. is further relied upon for teaching the application of different voltages. Baermann discloses a magnetic friction grate or clutch in which magnetic attraction or repulsion of an electromagnet on prepolarized magnetic poles is used to control the operation of the brake or clutch. Gold et al. teaches an electromagnetic clutch or brake assembly in which a clutch or brake is displaced so as to produce a desired engagement or disengagement. Harmon et al. discloses a variable pressure windshield wiper arm, which includes an electromagnetic clutch that is energized by a controller 88 to repel a plunger 82 upwardly toward a brake housing. Moreover, the calculation is made as to when and for how long to energize the clutch to make a desired adjustment and tip force.

However, Baermann, Gold et al. or Harmon et al. do not teach or suggest, taken singly or in combination with Applicants' admitted Prior Art, "a transformation operating means for applying voltages at different levels to the solenoid coil according to the position of the coupling member, wherein the transformation operating means supplies a voltage of a higher level to the solenoid coil during an initial operation for generating electromagnetic force so as to move the coupling member upward, and supplies a voltage of a lower level during maintaining

operation for maintaining a state where the coupling member is completely moved upward,” as recited in claim 1.

In rejecting claims 14 and 15, the Office Action relies on each of JP 10-311265 and Apetrei et al. for teachings of a solenoid housing having slits of a predetermined spacing. However, neither JP 10-311265 nor Apetrei et al. teaches or suggests the above-cited limitations of claim 1. Therefore, JP 10-311265 and Apetrei et al. fail to cure the deficiencies of the Applicants’ admitted Prior Art in view of Baermann, Gold et al., and Harmon et al. with respect to claim 1.

In view of the foregoing, it is respectfully submitted that the combination of elements set forth in independent claim 1 is not disclosed or made obvious by the applied prior art of record, including the Applicants admitted Prior Art, Baermann, Gold et al. Harmon et al., JP 10-311265 and Apetrei et al. Since the dependent claims depend from allowable independent claims, the dependent claims are also allowable for at least the reasons set forth above, as well as for the additional limitations set forth therein. Therefore, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) and allowance of all claims are respectfully requested.

CONCLUSION

Since the remaining patents cited by the Examiner have not been utilized to reject claims, but merely to show the state of the art, no comment need be made with respect thereto.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Sam Bhattacharya (Reg. No. 48,107) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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